U3 16



ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/014,774

DATE: 04/02/2002 (-5

TIME: 14:12:54

Input Set : A:\seqlist.txt.txt

```
4 <110> APPLICANT: D'Azzo, Alessandra
        Bonglovanni, Antonella
 5
        Nastasi, Tommaso
 8 <120> TITLE OF INVENTION: Protein Specific for Cardiac and Skeletal Muscle
10 <130> FILE REFERENCE: 2427/1F509-US1
12 <140> CURRENT APPLICATION NUMBER: US 10/014,774
13 <141> CURRENT FILING DATE: 2001-10-29
15 <150> PRIOR APPLICATION NUMBER: PCT/US00/11900
16 <151> PRIOR FILING DATE: 2000-04-28
18 <150> PRIOR APPLICATION NUMBER: US 60/131,814
19 <151> PRIOR FILING DATE: 1999-04-29
21 <160> NUMBER OF SEQ ID NOS: 24
23 <170> SOFTWARE: FastSEQ for Windows Version 3.0
25 <210> SEO ID NO: 1
26 <211> LENGTH: 1036
27 <212> TYPE: DNA
28 <213> ORGANISM: Mus musculus
30 <400> SEOUENCE: 1
31 ccctgttgca cggcttggag atggctgctc cctccgaaca cgtaggactg ggtgccccac
                                                                            60
                                                                           120
32 ggagccetge gegeecagag eccettecea eccgetteca ecaagtgeat ggagceaaca
33 tecgeatgga ecceteagga aegegageea eaegegtgga gagtttegee eaeggtgtgt
                                                                           180
                                                                           240
   getteagteg tgagecectg geeceggee aggtatttet agtggaaatt gaggaaaaag
35 agctgggctg gtgcgggcac ctacgtcttg gcctgaccgc tctggatccc gccagtctgg
                                                                           300
36 ccgctgtacc cgagttttca ctgcctgact tggtcagcct tggccacagt tgggtcttcg
                                                                           360
                                                                           420
   ctatcacacg ccaccacaac cgtgtgcccc gggaaggtca accagaagcg gaggcagcgg
37
                                                                           480
   tecceagtgg tecceaagee etactggttg aaceetatet gegeategag eagtteegaa
                                                                           540
   ttccccggga ccgtctggtg ggccgcagcc ggccagggct ttatagccac ctcttagatc
39
                                                                           600
   agetetatga acaaaacgtg etgeeteeta eagegegeeg aageegeftg ggtgttetet
41 tetgeecceg tgaggatggg acegeegaca tgeacateat cateaacggg gaggacatgg
                                                                           660
                                                                           720
42 geoctagege eegggggetg ceagetgete ageceeteta egetgtggta gatgtgtttg
                                                                           780
43 cttccaccaa gagegtgegt etggtecage tggagtatgg ettgecatet etgeagaete
                                                                           840
44 tqtqccqact agtgatccag aagagggtgg tacacaggct ggccattgat gtgctccacc
45 tgcccaaagg actgaaggac ttctgcaagt acgaatgaac gaatgaacgc ctgtctgtgg
                                                                           900
                                                                           960
   ccaccagage aaagteeceg gtggtgegee etgeetetag agaagtgget agtetgaage
                                                                          1020
   tqqtcqcaca qctcacaatc aqqqctqqaa ataaatagag ccgatgtgga tgttctgaga
                                                                          1036
48 aaaaaaaaaa aaaaaa
50 <210> SEQ ID NO: 2
51 <211> LENGTH: 285
52 <212> TYPE: PRT
53 <213> ORGANISM: Mus musculus
55 <400> SEQUENCE: 2
56 Met Ala Ala Pro Ser Glu His Val Gly Leu Gly Ala Pro Arg Ser Pro
                                                            15
57
    1
                     5
                                        10
```

RAW SEQUENCE LISTINGPATE: 04/02/2002

PATENT APPLICATION: US/10/014,774

TIME: 14:12:54

Input Set : A:\seqlist.txt.txt

```
Ala Arg Pro Glu Pro Pro Pro Thr Arg Phe His Gln Val His Gly Ala
58
59
                20
60
    Asn Ile Arq Met Asp Pro Ser Gly Thr Arq Ala Thr Arg Val Glu Ser
61
                                 4 N
62
    Phe Ala His Gly Val Cys Phe Ser Arg Glu Pro Leu Ala Pro Gly Gln
63
                            55
64
    Val Phe Leu Val Glu Ile Glu Glu Lys Glu Leu Gly Trp Cys Gly His
                                             75
66
    Leu Arg Leu Gly Leu Thr Ala Leu Asp Pro Ala Ser Leu Ala Ala Val
                                         90
67
68
    Pro Glu Phe Ser Leu Pro Asp Leu Val Ser Leu Gly His Ser Trp Val
69
                                     105
70
    Phe Ala Ile Thr Arg His His Asn Arg Val Pro Arg Glu Gly Gln Pro
71
                                120
                                                     125
72
    Glu Ala Glu Ala Ala Val Pro Ser Gly Pro Gln Ala Leu Leu Val Glu
73
                            135
                                                 140
    Pro Tyr Leu Arg Ile Glu Gln Phe Arg Ile Pro Arg Asp Arg Leu Val
74
75
                        150
                                             155
76
    Gly Arg Ser Arg Pro Gly Leu Tyr Ser His Leu Leu Asp Gln Leu Tyr
77
                    165
                                         170
78
    Glu Gln Asn Val Leu Pro Pro Thr Ala Arg Arg Ser Arg Leu Gly Val
79
                180
                                     185
80
    Leu Phe Cys Pro Arg Glu Asp Gly Thr Ala Asp Met His Ile Ile Ile
81
            195
                                200
                                                     205
82
    Asn Gly Glu Asp Met Gly Pro Ser Ala Arg Gly Leu Pro Ala Ala Gln
83
                            215
    Pro Leu Tyr Ala Val Val Asp Val Phe Ala Ser Thr Lys Ser Val Arg
85
                        230
                                             235
86
    Leu Val Gln Leu Glu Tyr Gly Leu Pro Ser Leu Gln Thr Leu Cys Arg
87
88
    Leu Val Ile Gln Lys Arq Val Val His Arq Leu Ala Ile Asp Val Leu
89
                                     265
90
   His Leu Pro Lys Gly Leu Lys Asp Phe Cys Lys Tyr Glu
91
            275
                                280
93 <210> SEQ ID NO: 3
94 <211> LENGTH: 970
95 <212> TYPE: DNA
96 <213> ORGANISM: Homo sapiens
98 <400> SEQUENCE: 3
99 cetgecetat ggeegagaga tggetgetge eteegageee gtggattegg gtgeaetetg
                                                                             60
100
     gggactegag egeceggage ececteecae eggetteeat egggtgeaeg gtgceaacat
                                                                             120
    ccgcgtggac ccctctggga cgcgggccac acgcgtggag agcttcgccc acggcgtgtg
                                                                             180
    cttcagccgc gagccgctgg ccccgggcca ggtcttcctg gtcgagatcg aggagaaaga
                                                                             240
103
     gctgggctgg tgcggacatc tgcgtctcgg tctgaccgcg ctggaccccg ccagtctggc
                                                                             300
104
    ccccgttccc gagttttctc tgcccgatct ggtcaacctg ggccacacct gggtcttcgc
                                                                             360
     catcacgege caccacaace gegtgeeceg ggagggeege ceggaggegg aggeagegge
                                                                             420
     ccccaqccqa cctccaaccc tcctcqtqqa accatatctq cqcattqaqc aqtttcqcat
                                                                             480
     teccogggac cgcctggtgg gccgcagccg gccagggctc tacagccatc tcttggacca
                                                                             540
107
     gctctatgag ctgaacgtgc tgcctccgac cgcgcgccgt agccqcctgg gtgtcctctt
                                                                             600
108
```

RAW SEQUENCE LISTING DATE: 04/02/2002 PATENT APPLICATION: US/10/014,774 TIME: 14:12:54

Input Set : A:\seqlist.txt.txt

```
109 ttgcccgcgc cccgatggca cggccgacat gcacatcatc atcaacggcg aggacatggg
                                                                              660
 110 cccgagcgcc cggggactgc cagctgcgca gcccctctac gcggtggtgg acgtgtttgc
                                                                              720
 111 ttccacaaag agcgtgcgcc ttgtccagct cgagtatggc ttgccatccc tgcagactct
                                                                              780
 112 gtgccgccta gtgatacaaa ggagcatggt gcaccggctg gccattgatg ggctccacct
                                                                              840
 113 gcccaaagaa cttaaggatt tctgcaagta tgagtgaaga cccacagtgc accagagcac
                                                                              900
114 agctgcatcc tggagcccca gacctgtggc tggctggtcc gaagttggcc acattgctgc
                                                                              960
115 cagccaagac
                                                                              970
117 <210> SEQ ID NO: 4
118 <211> LENGTH: 285
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
122 <400> SEQUENCE: 4
123
     Met Ala Ala Ala Ser Glu Pro Val Asp Ser Gly Ala Leu Trp Gly Leu
124
                      5
                                          10
125
     Glu Arg Pro Glu Pro Pro Pro Thr Arg Phe His Arg Val His Gly Ala
126
127
     Asn Ile Arg Val Asp Pro Ser Gly Thr Arg Ala Thr Arg Val Glu Ser
128
                                  40
129
     Phe Ala His Gly Val Cys Phe Ser Arg Glu Pro Leu Ala Pro Gly Gln
130
                             55
131
     Val Phe Leu Val Glu Ile Glu Glu Lys Glu Leu Gly Trp Cys Gly His
132
133
     Leu Arg Leu Gly Leu Thr Ala Leu Asp Pro Ala Ser Leu Ala Pro Val
134
135
     Pro Glu Phe Ser Leu Pro Asp Leu Val Asn Leu Gly His Thr Trp Val
136
                 100
                                      105
137
     Phe Ala Ile Thr Arg His His Asn Arg Val Pro Arg Glu Gly Arg Pro
138
                                 120
                                                      125
139
     Glu Ala Glu Ala Ala Ala Pro Ser Arg Pro Pro Thr Leu Leu Val Glu
140
                             135
                                                  140
141
     Pro Tyr Leu Arg Ile Glu Gln Phe Arg Ile Pro Arg Asp Arg Leu Val
142
                         150
                                              155
     Gly Arg Ser Arg Pro Gly Leu Tyr Ser His Leu Leu Asp Gln Leu Tyr
143
144
                     165
                                                              175
145
     Glu Leu Asn Val Leu Pro Pro Thr Ala Arg Arg Ser Arg Leu Gly Val
146
                                     185
147
     Leu Phe Cys Pro Arg Pro Asp Gly Thr Ala Asp Met His Ile Ile
148
                                                      205
149
     Asn Gly Glu Asp Met Gly Pro Ser Ala Arg Gly Leu Pro Ala Ala Gln
150
                             215
     Pro Leu Tyr Ala Val Val Asp Val Phe Ala Ser Thr Lys Ser Val Arg
151
152
                         230
                                             235
153
     Leu Val Gln Leu Glu Tyr Gly Leu Pro Ser Leu Gln Thr Leu Cys Arg
154
                     245
                                         250
155
    Leu Val Ile Gln Arg Ser Met Val His Arg Leu Ala Ile Asp Gly Leu
156
                                     265
157
    His Leu Pro Lys Glu Leu Lys Asp Phe Cys Lys Tyr Glu
158
            275
                                 280
160 <210> SEQ ID NO: 5
```

RAW SEQUENCE LISTING DATE: 04/02/2002 PATENT APPLICATION: US/10/014,774 TIME: 14:12:54

Input Set : A:\seqlist.txt.txt

```
161 <211> LENGTH: 91
162 <212> TYPE: PRT
163 <213> ORGANISM: Mus musculus
165 <400> SEQUENCE: 5
166 Arg Ser Pro Ala Arg Pro Glu Pro Pro Pro Thr Arg Phe His Gln Val
                                        10
167
    His Gly Ala Asn Ile Arg Met Asp Pro Ser Gly Thr Arg Ala Thr Arg
168
                                     25
170 Val Glu Ser Phe Ala His Gly Val Cys Phe Ser Arg Glu Pro Leu Ala
                                40
171
172 Pro Gly Gln Val Phe Leu Val Glu Ile Glu Glu Lys Glu Leu Gly Trp
                            55
174 Cys Gly His Leu Arg Leu Gly Leu Thr Ala Leu Asp Pro Ala Ser Leu
                        70
176 Ala Ala Val Pro Glu Phe Ser Leu Pro Asp Leu
                    85
179 <210> SEQ ID NO: 6
180 <211> LENGTH: 94
181 <212> TYPE: PRT
182 <213> ORGANISM: Drosophila virilis
184 <400> SEQUENCE: 6
185 Arg Ser Pro Ser Ser Cys Pro Asn Asn Leu Pro Pro Leu Gln Phe His
186
                     5
                                        10
187 Thr Val His Gly Asp Asn Ile Arg Ile Ser Arg Asp Gly Thr Leu Ala
189 Arg Arg Phe Glu Ser Phe Cys Arg Ala Ile Thr Phe Ser Ala Arg Pro
190
191
    Val Arg Ile Asn Glu Arg Ile Cys Val Lys Phe Ala Glu Ile Ser Asn
                            55
193 Asn Trp Asn Gly Gly Ile Arg Phe Gly Phe Thr Ser Asn Asp Pro Ala
194
                        70
                                             75
    Ser Leu Glu Gly Ala Leu Pro Lys Tyr Ala Cys Pro Asp Leu
195
                    85
198 <210> SEQ ID NO: 7
199 <211> LENGTH: 26
200 <212> TYPE: PRT
201 <213> ORGANISM: Mus musculus
203 <400> SEQUENCE: 7
204 Leu Tyr Ala Val Val Asp Val Phe Ala Ser Thr Lys Ser Val Arg Leu
205
    1
                    5
206 Val Gln Leu Glu Tyr Gly Leu Pro Ser Leu
207
209 <210> SEQ ID NO: 8
210 <211> LENGTH: 24
211 <212> TYPE: PRT
212 <213> ORGANISM: Drosophila virilis
214 <400> SEQUENCE: 8
215 Leu Trp Ala Phe Leu Asp Val Tyr Gly Ser Thr Gln Ser Leu Arg Met
216
```

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/014,774**DATE: 04/02/2002

TIME: 14:12:54

Input Set : A:\seqlist.txt.txt

Output Set: N:\CRF3\04022002\J014774.raw

```
217 Phe Arg Gln Gln Leu Pro Asn Met
218
                 20
220 <210> SEQ ID NO: 9
221 <211> LENGTH: 71
222 <212> TYPE: PRT
223 <213> ORGANISM: Mus musculus
225 <400> SEQUENCE: 9
226 Pro Thr Arg Phe His Gln Val His Gly Ala Asn Ile Arg Met Asp Pro
227
    Ser Gly Thr Arg Ala Thr Arg Val Glu Ser Phe Ala His Gly Val Cys
228
229
                                     25
                 20
    Phe Ser Arg Glu Pro Leu Ala Pro Gly Gln Val Phe Leu Val Glu Ile
230
                                 40
    Glu Glu Lys Glu Leu Gly Trp Cys Gly His Leu Arg Leu Gly Leu Thr
232
                             55
233
    Ala Leu Asp Pro Ala Ser Leu
234
235
    65
237 <210> SEO ID NO: 10
238 <211> LENGTH: 71
239 <212> TYPE: PRT
240 <213> ORGANISM: Drosophila virilis
242 <400> SEQUENCE: 10
243 Pro Val Pro Phe His Ile Thr Lys Gly Arg Asn Val Arg Leu Ser His
244
    Asp Arg Phe Val Ala Ser Arg Thr Glu Ser Asp Phe Cys Gln Gly Tyr
245
246
                 20
                                      25
    Val Phe Thr Ala Arg Pro Ile Arg Ile Gly Lys Leu Ile Val Gln Val
247
248
                                 40
             35
    Leu Lys Thr Glu Gln Met Tyr Val Gly Ala Leu Ala Leu Gly Leu Thr
249
250
         50
251
    Ser Cys Asn Pro Ala Leu Leu
252
254 <210> SEQ ID NO: 11
255 <211> LENGTH: 35
256 <212> TYPE: PRT
257 <213> ORGANISM: Mus musculus
259 <400> SEQUENCE: 11
260
    Ile Asn Gly Glu Asp Met Gly Pro Ser Ala Arg Gly Leu Pro Ala Ala
261
                                          10
    Gln Pro Leu Tyr Ala Val Val Asp Val Phe Ala Ser Thr Lys Ser Val
262
263
                 20
                                     25
264
    Arg Leu Val
265
             35
267 <210> SEQ ID NO: 12
268 <211> LENGTH: 35
269 <212> TYPE: PRT
270 <213> ORGANISM: Drosophila virilis
272 <400> SEQUENCE: 12
273 Ile Asn Asn Glu Glu Lys Gly Val Ile Leu Ser Gly Ile Asp Thr Arg
```



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 04/02/2002

PATENT APPLICATION: US/10/014,774

TIME: 14:12:55

Input Set : A:\seqlist.txt.txt

Output Set: N:\CRF3\04022002\J014774.raw

L:429 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:24 L:429 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:24

 $L\!:\!429$ M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24